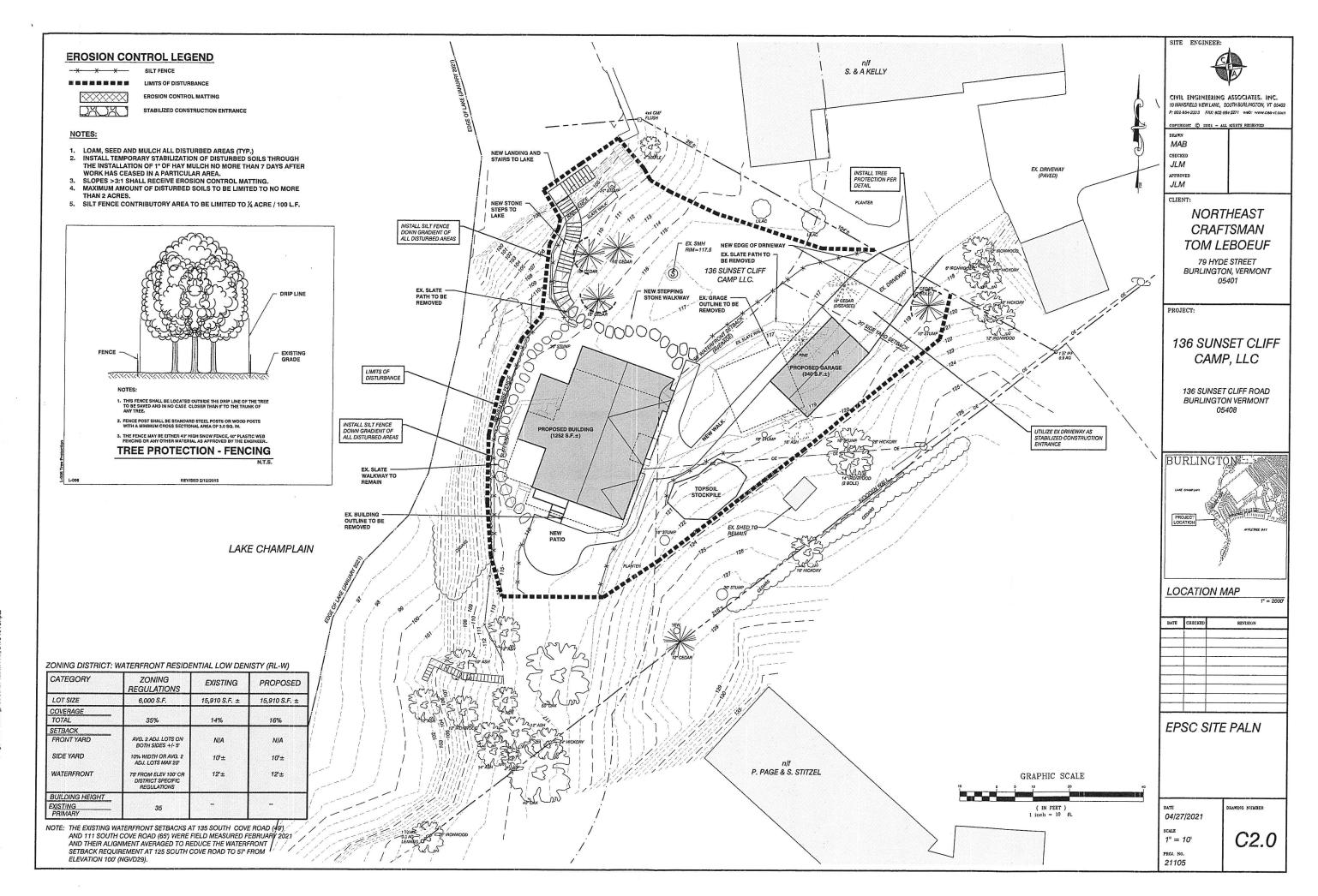


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oCADD Projects\2021\21105\1-CADD Files-21105\dwg\21105-site.dwg.4/27/2021 12:38:01 PM DWG To PDE rc2

This project has been deemed to qualify as a Low Risk Site which is subject to the erosion prevention and sediment control (EPSC) standards set for in the State of Vermont's Low Risk Site Handbook for Erosion Prevention and Sediment Control

ny basi management practices (BMPs) depicted on the project's EPSC Site plan which go beyond to Handbook requirements are considered to be integral to the management of the also and present components of the municipal EPSC approval for the project which shall be implemented.

The EPSC plan depicts one enap shot in time of the site. All construction sites are fluid in their de-

pecific BMP's which are critical to allowing the project to be considered a Low Risk site include

Demarcate Limits of Disturbance

lequirement: ou must physically mark the limits of construction activity using one of the methods de

Requirement:

Design, install, implement, and maintain effective pollution prevention measures to minimize the
discharge of pollutants. At a minimum, such measures must be designed, installed, implemented
and maintained in accordance with the following requirements.

ow to comply:

Minimize the exposure of the following to precipitation and to stormwater: building matter
building products, constitution wastes, trash, landscape materials, tertifizers, pessiodes,
heroicides, detergents, suntiary weste, and other materials present on the site.

Complete Section 1.1.

**Complete Section 1.1.*

**Complete Section 1.

Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of polutants, or where exposure of a specific materix or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

3. Limit Concurrent Earth Disturbance

curpose: Imit the amount of soil exposed at one time to reduce the polential erosion on the constru

The maximum area of concurrent earth disfurbance is specified on the sile's written authorization of discharge. Earth disturbance at any one time cannot exceed the maximum concurrent isstrutance identified in the suthorization. Areas that ere a final stabilization ornithat have been emporarily stabilized in accordance with Section 4 of this handbook, are not counted toward the strinum concurrent disturbance area.

. Site Stabilization

runposes. Bredfing and mulching, applying erosion control masting, and hydroseeding are all methods to temporarily stabilize exposed soil and prevent soil erosion prior to vegetative growth. Mulches and masting protect he coil surface while grass is establishing. Areas of earth disturbance may also be stabilized with stone, such as rip-rap or gravel, or other imperious surfaces such as pevernent and

Requirements for Temporary Stabilization: All areas of parth disturbance must have temporary or final stabilization within 14 days of initial disturbance, as stated in the project authorization. After this time, disturbed areas must be

cturer's instructions. Must include mulch component. Not acceptable stabilization to

Nood Chip Mulch or Stump Grindings Cover entire area with 2-7 inches or more of wood chip mulch or stump grindings.

Stabilized Construction Access

there will be any vehicle or equipment traffic off of the construction site, you must install a labilized construction access at the start of construction.

Now to Install:

Rock Size: Use a mix of 1 to 4 Inch stone

Rock Size: Use a mix of 1 to 4 Inch stone

Rock Size: Use a mix of 1 to 4 Inch stone

Rock Size: Inches minimum. Incred at road for vehicle turning

Width: 12 feet minimum. For longth of driveway for residential projects, if shortey

controller: Place literation under entire stone bod

istred. Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same bushess day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by aveograp, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from nosing or everging tracked out sediment into any stormwater conveyance, storm drain links, or water of the state.

Divert Upland Runoff

requirement of contributes to the construction sits from upslope areas and the site meets the interest of the contributes are required to first install a diversion borm and stabilized swale folice disturbing one config

Construct down to the minimum speciation above. Compact have been with a chore or ereit-moving equipment. Compact have been with a chore or ereit-moving equipment. Stabilized the control of the

6. The diversion berm shall remain in place until the disturbed areas are completely

Install Perimeter Controls

urpose:
If Fence and Erosion Control Berms inturcept runoff and allow suspended sediment to settle or ter out. Filter Socks and Straw Wattles also filter construction runoff and are acceptable for use is oedfic situations. Sit Fence, Erosion Control Berms, Filter Socks and Straw Wartles are all population primited controls based on alle specific conditions. Permitte(s) must ensure the

- ulrementar.
 On the downhill side of the construction activities.
 Between any disk, availe, storm drain, or surface water and the disturbed soil.
 Perimeter controls not labeled as blodegradable shall be removed once the dra
 reached final stabilization.

How to Comply: Select and install a perimeter control from the following options: Sift Fence, Erosion Control Berms, Fifter Socks, or Straw Wattles.

Sift Fence Maintenance

ove accumulated sediment before. It is halfway up the fence. Ensure that silt fence is trenched ound and there ere no gaps. Replace any silt fence that is torn, ripped, or otherwise damage:

Proprietary intel Protection:
Shall provide for storage and removal of sediment and be sized appropriately for the drainage area, while allowing stormwater to filter through. These may be used if installed and maintained is accordance with the manufacturer's specifications.

urpose:
Ome sites may benefit from the use of water bars on the construction site. When installed these lay capture and redirect runoff to a stable low gradient location. Water bars limit the erosive elocity of water by diverting surface runoff at pre-designed intervals.

These can be constructed per the following detail, with side slopes no ateeper than 4:1 where vehicles cross with a minimum design height of 12 inches, measured from channel bottom to a

Water Bar Installation: Water bars should have stable outlets, either natural or constructed. The spacing should follow

Slope (%)	Distance between structures (ff)
<5	125
5 - 10	100
10.20	75
20 - 35	50
. 25	

Slow Down Channelized Runoff

e: heck dams reduce erosion in drainage channels by slowing down the stormwater flow,

There is a concentrated flow(e.g. in a ditch or channel) of stormwater on your site, then you are equired to install stone check dams. Hay bales and sit fence must not be used as check dams.

Lindex Lism installation: Highlip. No greated than 2 feet. Center of dem should be 9 inches lower than the side elevation Side slopes. 2.1 or flather (see p.03 for slope calculation) Sides size. Use a radicular 2 for 9 in strate; this larger stone should act as amoring, while the smaller stone helps to filer the channetzed runoff. The small stone should be placed primarly: I he institute of the chancetzed runoff. The small stone should be placed in an emoring layer on the an institute of the chack dam and the large stone should be placed in an emoring layer on the

outside. Width: Dams should spen the width of the channel and extend up the sides of the banks Spacing: Space the dams so that the bottom (too) of the upstream dam is at the elevation of the top (crest) of the downstream dam. This spacing is equal to the height of the check dam didded by the bases elected. divided by the channel slope.

Check Dam Maintenance:

Correct all observed damage immediately after every ru naff event.

Remove all sediment accumulated behind the check dams and dispose of in an upland location.

If significant erosion is observed between check dams, the channel shall be stone lined.

Rock Quilet Protection:
Waterway or outlets with concentrated stormwater runoff shall be stabilized with rigrap, propstabilization product or permanent material. This additional stabilization is applicable in size
where the channel slope and relocity or soil type require additional stabilization. All outlets in
concentrated stormwalar flows will require a stabilized bod. Store shall be sized soil its not

11. Slope Stabilization

Purpose: Surface covering designed to protect and stabilize an area prone to erosion where seeding and mulching may be inadequate, generally slopes 3:1 or greater. The erosion potential may be due solely to slope angle; however, a more gradual slope and poor soil structure can also require additional stabilization.

Requirements for Temporary Stabilization: Use of one of the listed slope protection practices below on slopes 3:1 and greater or as needed of

ormed protective blanket of straw or other plant residue, formed into a mat, with a supporting framework on one or both sides. This mesh cannot be made of a material with welded joints

2. Winter Construction Requirements: October 15 - April 15

rurpose: Writist construction' as discussed here, describes the period from October 15 through April 15, when eroston prevention and sediment control in significantly more diffacilit. There are specific requirements for sites that conduct earth disturbance during the defined Winter Construction Period and for sites where disturbed areas have not reached final stabilization by October 15.

Rains in late fall, thaws throughout the winter, and spring melt and rains can produce significant flows over frozen and saturated ground, greatly increasing the potential

Misseding is not completed by September 15, additional non-vegetative protection must be used to stabilize the site for the winter period. Areas of disturbance not seeded and mulched by September 15 are required to temporarily stabilize by one of the following nethods:

Implement Rolled Erosion Control Products (i.e. matting) over the areas of earth disturbance

Requirements for Winter Construction on activities involving earth disturbance continue into the winter construction period, g requirements apply:

structures.

3. For areas of disturbance within 100 it of a waterbody, the following must be installed across the slope, down gradent of the earth disturbance: a combination of one practice from group A placed in from of a practice from group B, or two group B practices, or a single row of Reinforce

rence		
Group A	Group B	
Filter Socks	Sift Fence	
Straw Wattles	Erosion Control Berms	

Drainage structures must be kept open and free of snow and ice dams.
 Sift fence and other practices requiring earth disturbance must be installed ahead of frozen.

To ensure cover of disturbed soil in advance of a precipitation or melt event, areas of sisturbed soil must be stabilized prior to any runoff producing event.

Stabilization is not required if the work is occuring in a self-contained excavation (i.e. no cutlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches), provided any devatering, if necessary, is conducted in accordance with Part 13.

Prior to stabilization, snow or ice must be removed to the extent practicable.
 Use stone to stabilize areas such as the perimeter of buildings under construction or where construction which staffs is anticipated. Stone paths should be sufficient width to accommodate validate or equipment traffs.

13. Dewatering Activities

mize and prevent discharges of sediment as a result of dewatering activities.

lequirements:

tommellar and groundwater from dewatering activities shall be uncontaminated and shall be literated to passed through a sediment imports glocker, or both, and roused in a manner that does to passed through a sediment imports glocker, or both, and covided in a manner that does the surface of the produing area to provent disturbance of the sedient imstactly Assaulty under con-traction of the pumped directly to storm drains or other conveyance that leads to waters without perferenting one or more of the practices described below.

14. Concrete Washout

Concrete wash water often contains a slumy of heavy metals, can be caustic, and has a high p.H. As a result, concrete washwater is not a permitted discharge.

Concrete Washout Installation

If cernent washout is going to occur on site, a fined concrete washout as shown below shall be used onsite. Care should be given to assure that the washout does not overtop during a storm event. Proprietary lined and washout basins may also be utilized in accordance with manufacturer's

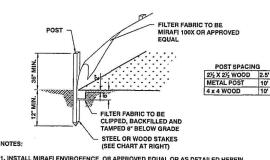
ormanent stormwater freatment practices are constructed to maintain water quality, preserve wisting water table elevations, prevent downstream flooding, and are other required for a project order a Vermoni operational stormwater dacharge permit applicable to the construction or order a Vermoni operational stormwater dacharge permit applicable to the construction or the construction of the construction of the construction of the construction of the construction or the construction of the construct

Permanent Stormwater Treatment Practices (STPs) Include Inflitration and filtering practices as we as detention ponds and treatment wetlands. It is critical that Inflitration practices do not receive runoff until the site area has reached final stabilization.

16. Inspection, Maintenance, and Discharge Reporting Sile inspections are required to ensure that all eroston prevention and sodiment control practices are sufficient and functioning properly. Regular inspections and maintenance of practices will help to reduce costly repairs and minimize the risk to water quality from construction stormwater.

Requirements: Inspect the site at least once every 7 days and after every raintal or snowmek that results in inspect the site at least once every 7 days and after every raintal or snowmek that results in stormwater runoff. Perform maintenance to ensure that practices are functioning according to the specifications cuttined in this handook, in the event of a visibly turbid discharge from the construction site, you must take immediate action to inspect and maintain existing smotion prevention and sendernet control prevention and sendernet control measures must be installed as necessary, including temporary stabilization, to minimize and prevent the adjoint good sendernet control measures must be installed as necessary, including temporary stabilization, to minimize and prevent the discharged results of scale national temporary to sediment lander summater from the controlled in surface waters continues, the permitted in required to notify DEC within 24 hours.

While documentation of a routine inspection is not required, example inspection forms and forms for required discharge reporting are available at the Stormwater Program website. Permittees shall review Construction General Permit 3-0200 for all discharge reporting requirements. A copy of the Low Risk Site Handbook shall be kept on-site. Daily Inspections are required from October 15 through Javil 15.



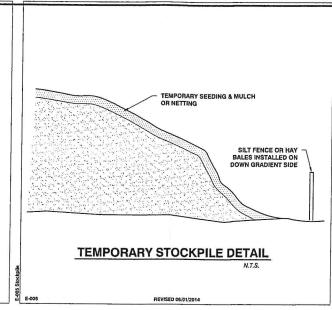
1. INSTALL MIRAFI ENVIROFENCE, OR APPROVED EQUAL OR AS DETAILED HEREIN.

2. INSTALL SILT FENCES AT TOES OF ALL UNPROTECTED SLOPES AND AS PARALLEL TO CONTOURS AS POSSIBLE, THIS INCLUDES ALL FILLED OR UNPROTECTED SLOPES CREATED DURING CONSTRUCTION, NOT NECESSARILY REFLECTED ON THE FINAL PLANS. CURVE THE ENDS OF THE FENCE UP INTO THE SLOPE. REMOVE SEDIMENT WHEN ACCUMULATED TO HALF THE HEIGHT OF THE FENCE. SILT FENCES ARE TO BE

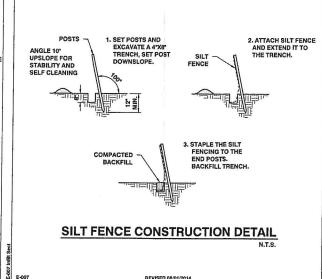
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.

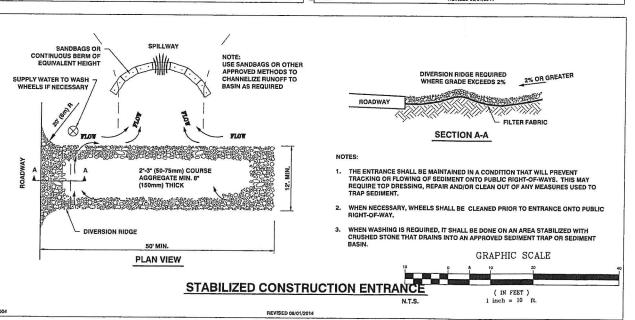


WOOD POST



POSTS ANGLE 10° UPSLOPE FOR STABILITY AND SELF CLEANING PLASTIC ORANGI EXISTING GRADE NATIVE MATERIAL CONSTRUCTION FENCE DETAIL





SITE ENGINEER:

CIVIL ENGINEERING ASSOCIATES, INC. P: 802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

MAB CHECKED JLM JLM

CLIENT:

NORTHEAST CRAFTSMAN TOM LEBOEUF

79 HYDE STREET BURLINGTON, VERMONT 05401

PROJECT:

136 SUNSET CLIFF CAMP, LLC

136 SUNSET CLIFF ROAD **BURLINGTON VERMONT**



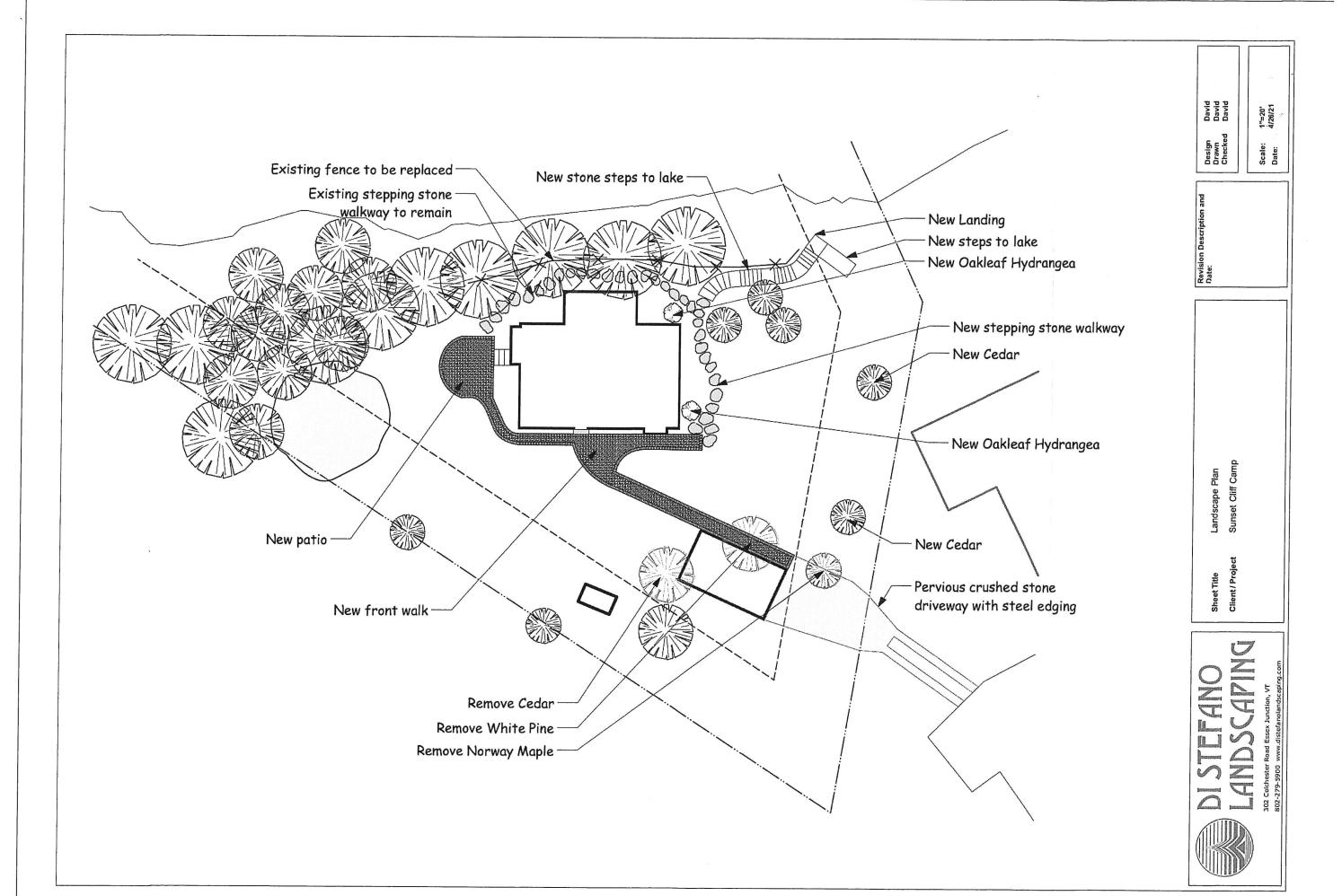
REVISION

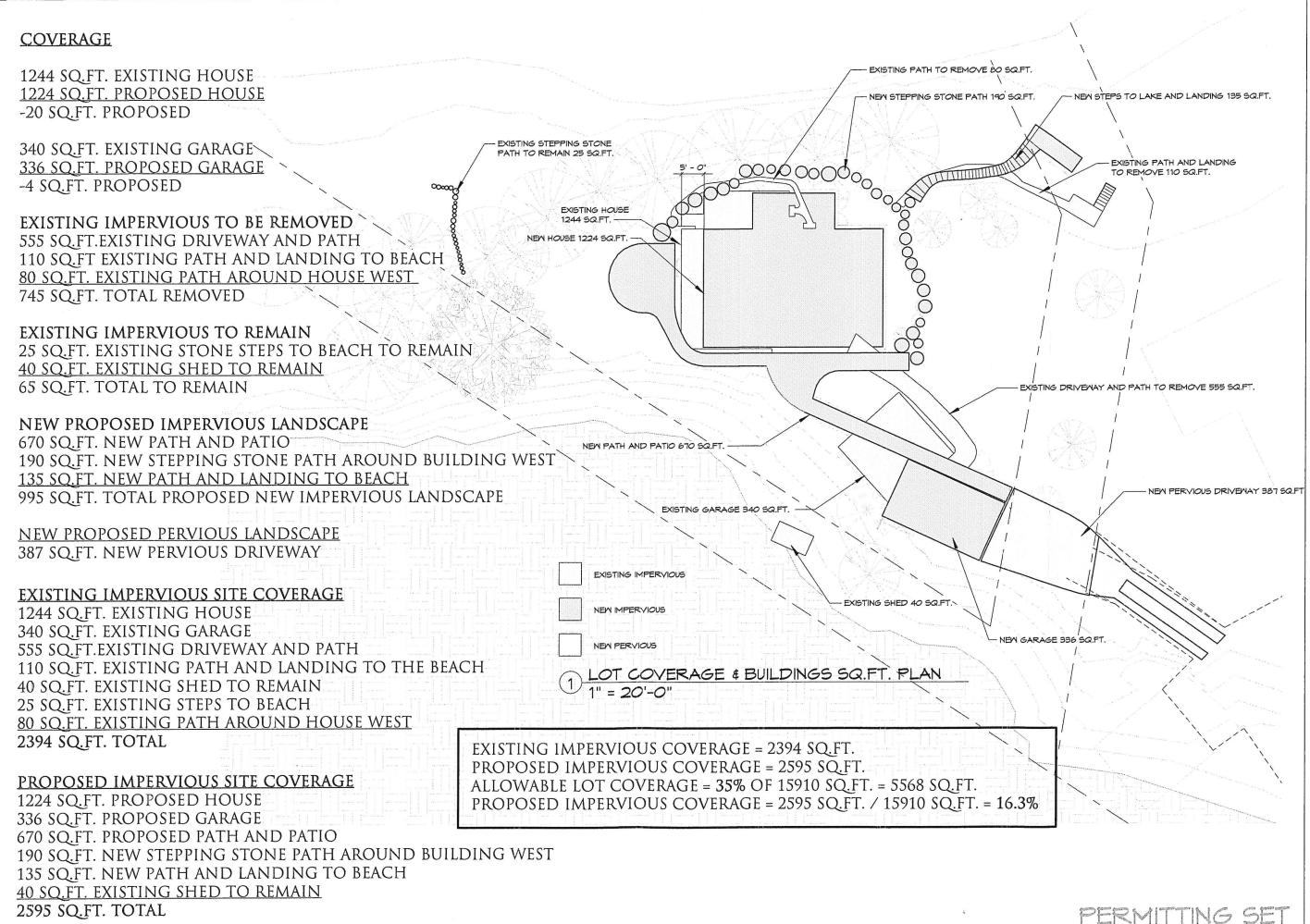
EPSC DETAILS AND **SPECIFICATIONS**

AWING NUMBER 04/27/2021 SCALE 1" = 10"

21105

C2.1







Ш SUNO

LOT COVERAGE BUILDINGS SQ.FT. SITE PLAN

4.27.2021

1" = 20'-0'

P1



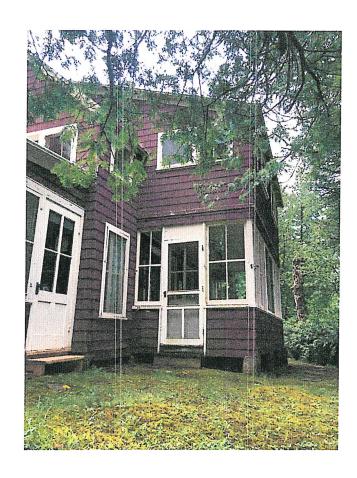
EXISTING HOUSE FROM NORTH



EXISTING HOUSE FROM EAST



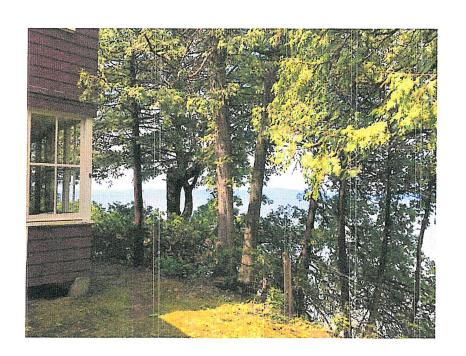
EXISTING HOUSE FROM SOUTH



EXISTING HOUSE FROM NORTHWEST



EXISTING GARAGE FROM EAST WITH HOUSE BEYOND



EXISTING HOUSE SHOWING PROXIMITY TO CLIFF AND LAKE

PERMITTING SET



PHOTOS OF EXISTING PROPERTY

4.27.2021

P2

Burlington Department of Public Works Stormwater Program

234 Penny Lane Burlington, VT 05401 P.O. Box 878 (05402)



PH: 802-863-4501 Email: stormwater@burlingtonvt.gov

Residential (R1 & R2) Stormwater Management Plan

This questionnaire is required for single family detached dwellings or duplex properties where additional impervious surface is proposed and the total lot impervious surface area is greater than 2500 sq. ft. This form should be submitted directly to the DPW Stormwater Program above. If you need help completing this form, please contact stormwater@burlingtonvt.gov or 863-4501 for technical assistance.

YOU MUST INCLUDE A SKETCH OR SITE PLAN OF YOUR EXISTING AND PROPOSED SITE AND INCLUDE THE EXISTING AND PROPOSED FLOW PATHS OF STORMWATER ON YOUR PROPERTY

Project Location: 136 Sunset Cliff Road

Impact Review: Impervious Surface Area Breakdown	Area (sq. ft.)				
Type of Surface	Existing	Proposed			
Total impervious surface	2,285± SF	2,595± SF			
Change in Total impervious surface	310± SF				
Connected Imperviou	Connected Impervious Surfaces				
Rooftop area that drains to impervious surface and runoff reaches city street or property boundary	0 SF	0 SF			
Driveway area that drains directly to city street or property boundary	0 SF	0 SF			
Walkway/Patio/Deck/other area that drains to impervious surface and runoff reaches city street or property boundary	0 SF	0 SF			
Total connected impervious	0 SF	0 SF			
Change in total connected impervious (proposed – existing)					
Disconnected Impervious Surfaces					
Rooftop area that drains to pervious surface where runoff soaks in	1,554± SF	1,632± SF			
Driveway area that drains to pervious surface where runoff soaks in before reaching the city street or the property boundary (or a driveway made of pervious material)	342± SF	0± SF			
Walkway/Patio/Deck/Other area that drains to pervious surface where runoff soaks in before reaching the city street or the property boundary (or is made of pervious material)	389± SF	963± SF			
Total disconnected impervious	2,285± SF	2,595± SF			
Change in total disconnected impervious (proposed – existing)	310± SF				

Impervious surfaces are areas that prevent the infiltration of water into the ground and shall include, but not be limited to, roofs, patios, garages, storage sheds and similar structures. Impervious surfaces also include compacted dirt and gravel surfaces. Decks that allow water to seep through onto pervious surfaces can be considered disconnected.

Pervious surfaces are areas such as grass, clean gravel, pervious concrete, permeable pavers that allow water to infiltrate rather than runoff.

Page
Mitigation Review:
The Burlington Stormwater Program reserves the right to request that specific measures or a specified volume of stormwater runoff be mitigated based on the overall impact of connected impervious on the site.
Is this is a new home (including tear down and replacement)? Yes \boxtimes No \square If yes , complete information below and contact <u>stormwater@burlingtonvt.gov</u> or 863-4501 for a required technical assistance meeting.
If no , please feel free to contact the Burlington Stormwater Program for additional technical assistance, but at a minimum, you must complete the information requested below:
How will increased stormwater runoff from any increase in impervious surface be managed to the maximum extent practicable? For information regarding these and other stormwater management practices visit: http://www.vtwaterquality.org/stormwater/htm/sw_LID.htm http://www.vtwaterquality.org/stormwater/htm/sw_LID.htm http://www.vtwaterquality.org/stormwater/htm/sw_LID.htm http://www.vtwaterquality.org/stormwater/htm/sw_LID.htm
☐ Installation of green roof will minimize runoff from rooftop
Runoff from rooftops will be directed to pervious green space
☐ Runoff from rooftops will be directed to rain barrels* for storage and gradual release or use
☐ Runoff from impervious surfaces will be directed to a rain garden*
☐ Nation from impervious sarraces will be directed to a famigarden. ☐ Driveway is/will be permeable (permeable pavers, grass pavers, pervious gravel driveway)
☐ Walkways is/will be permeable (permeable pavers, grass pavers, pervious gravel driveway)
☐ Driveway impervious surface and connectivity has been/will be minimized with use of strip driveway
(2 strips of asphalt with grass strip down middle)
☐ Connected Impervious surface has been minimized (please explain)
☐ Other, please attach explanation
WNER AGREEMENT
ttest that the information above is correct to the best of my understanding and that I will install the measures I have
dicated or manage the runoff in a way to minimize the amount of stormwater runoff from my property. I understand
at the City has the right to inspect my property to ensure that the measures have been installed and that failure to ide by the measures above may constitute a violation of Chapter 26 and my authorization to discharge stormwater to
e City Stormwater conveyance system.
Bradley Steele Bradley Steele 4.27.21
Printed Name Signature Date
an Approved by: Date:
Burlington Stormwater Program

Residential Stormwater Management Plan

For Property at: 136 Sunset Cliff Road

^{*} Visit https://www.burlingtonvt.gov/DPW/Get-Involved for stormwater workshops and/or rebate opportunities that may assist in the installation/purchase of these stormwater management measures.



Stormwater Management Plan Pre-Screening

Please provide the following information to the Stormwater Program (<u>stormwater@burlingtonvt.gov</u>, ph: 863-4501) in order to determine what the requirements will be for your project.

General Information

o Project Address: 136 Sunset Cliff Road

o Owner: 136 Sunset Cliff Camp, LLC

o Engineer: Civil Engineering Associates, Inc.

Brief project description:

The proposed project involves removal of the existing camp and garage and construction of a replacement camp with a new garage.

Stormwater Management Plan

o Impervious¹ change summary

Condition	Туре	Total Impervious (s.f.)
Existing Conditions	Existing Impervious	2,285± SF
	Total Proposed (1+2+3)	2,595± SF
Dunmand	1) New ²	1,438± SF
Proposed	2) Existing to Remain	60± SF
	3) Redeveloped	1,097± SF
Net New	Total Proposed – Existing	310± SF

If available at this time:

• Existing conditions: description of existing conditions, description of existing stormwater system, existing drainage issues, current connectivity to City system

The existing camp is disconnected and driveway sheet flows to existing lawn areas.

 Proposed Conditions: description of proposed conditions, brief description of proposed stormwater system, proposed method of discharge to receiving water or City system (overland flow, direct connection via pipe, existing or new manhole or CB)

The proposed camp will continue to utilize rooftop disconnection and grade the proposed driveway to drain in vegetated lawn areas.

¹ Impervious = any surface off of which water runs off rather than infiltrates, including, but not limited to rooftops and paved/unpaved (gravel/packed dirt) driveways, walkways and patios

² Impervious where there is not currently impervious